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BUAN, CARTER & ASSOCIATES, INC.

Civil
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Planning

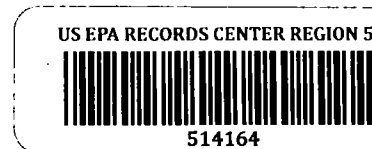
CONSULTING ENGINEERS
4820 MINNETONKA BOULEVARD
MINNEAPOLIS, MINNESOTA 55416
(612) 929-0477

Water Systems
Wastewater Systems
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Highways & Streets

January 10, 1978

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Mr. Richard E. Koppy, City Engineer
City of St. Louis Park
City Hall
5005 Minnetonka Blvd.
St. Louis Park, Minnesota 55416



Draft

Re: City Projects No. 74-24 and 74-25 (Oak Park Village)

Dear Mr. Koppy:

In keeping with your request, we are glad to provide background material on the planning and actual removal of material containing creosote wastes at the Oak Park Village development site.

The project included construction of watermain facilities, sanitary sewers, storm sewers, streets, lighting facilities, and an underground sprinkling system for a section of the parkway, plus pedestrian walkways.

Anticipated location of the material to be removed was determined by use of the soil borings and maps furnished to us by the City. Based upon conferences with Mr. David Rudberg, copies of a number of the borings were incorporated into the specifications and contract documents. Sheet No. 13 of the plans, or working drawings, indicates those general areas where material containing creosote were shown as were the approximate depths and the general disposal site.

The bid schedule contained Pay Item 2105.501 for Common Excavation. This item was an open end or unit price item and not a lump sum item. The aim was to permit the volume of work to be adjusted as dictated by the conditions actually encountered.

In keeping with an understanding between the Minnesota Pollution Control Agency and Mr. Rudberg, the removal of the creosote material was to be restricted to a maximum depth of 8 feet. This restriction was set forth in the special provisions "Specification 2105-Excavation of Soil Containing Creosote Wastes", that was made a part of the Special Provisions of the Specifications. A copy of this provision, which is identified as Page 6a, is attached.

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The specification and plans were all approved by Mr. Rudberg and his staff.

The volume of special excavation was determined by calculating the areas where material containing creosote was anticipated and the approximate depth as shown by the borings. In all, a total of 44,130 cubic yards of material was removed.

Before excavation was begun, a City survey crew did the necessary field work to permit cross sections to be prepared to determine existing elevations of the ground surface. After the excavation work was completed, a City crew recross-sectioned the areas. From these surveys the volume of excavated material was calculated.

In the special excavation operation, work was concentrated at those locations where the soil borings indicated creosote wastes, but at other locations where wastes were indicated by the extensive excavation for the watermains, sanitary sewer lines, and storm sewers, special excavation was carried out.

To avoid excavating material that did not contain creosote, in some areas a bulldozer was used to cut trenches the width of the blade to better define the locations where excavation was necessary. During those stages of the work when excavation was in progress, I visited the project rather frequently. George Anderson of our staff was at the site almost continuously. As you are aware, like yourself, Mr. Rudberg frequently inspected the job. Sometimes we met jointly with George Anderson. In these conferences methods of excavation were reviewed.

The irregular final shape of the areas of special excavation indicates the attempt to continue work until the contaminated material was removed, rather than stake out an area where excavation was considered necessary and not proceed beyond these limits.

Some added work to make the site suitable for residential housing must be mentioned. This operation related to the removal of a large volume of old railroad ties, timbers, and similar material near the north end of the job. This work was no easy task and the contractor was paid \$15,030.00 for 5,010 cubic yards of unclassified excavation.

Sincerely,

BUAN, CARTER & ASSOC., INC.

Archie N. Carter, P.E.

ANC:gp

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